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CLAIMS

- 1. A CDR-grafted antibody heavy chain having a variable region domain comprising acceptor framework and donor antigen binding regions wherein the framework comprises donor residues at at least: one of positions 6, 23 and/or 24, 48 and/or 49, 71 and/or 73, 75 and/or 76 and/or 78 and 88 and/or 91.
- 2. A CDR-grafted heavy chain according to Claim 1 comprising donor residues at positions 23, 24, 49, 71, 73 and 78, or at positions 23, 24 and 49.
- 3. A CDR-grafted heavy chain according to Claim 2 comprising donor residues at positions 2, 4, 6, 25, 36, 37, 39, 47, 48, 93, 94, 103, 104, 106 and 107.
- 4. A CDR-grafted heavy chain according to Claim 2 or 3, comprising donor residues at one, some or all of positions:

1 and 3,

69 (if 48 is different between donor and acceptor),

38 and 46 (if 48 is the donor residue),

67,

82 and 18 (if 67 is the donor residue),

91, and

any one or more of 9, 11, 41, 87, 108, 110 and 112.

- 5. A CDR-grafted heavy chain according to any of the preceding comprising donor CDRs at positions 26-35, 50-65 and 95-100.
- 6. A CDR-grafted antibody light chain having a variable region domain comprising acceptor framework and donor antigen binding regions wherein the framework comprises donor residues at at least one of positions 1 and/or 3 and 46 and/or 47.

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- 7. A CDR-grafted light chain according to Claim 6 comprising donor residues at positions 46 and 47.
- 8. A CDR-grafted antibody light chain having a variable region domain comprising acceptor framework and donor antigen binding regions wherein the framework comprises donor residues at at least one of positions 46, 48, 58 and 71.
- 9. A CDR-grafted light chain according to Claim 8 comprising donor residues at positions 46, 48, 58 and 71.
- 10. A CDR-grafted light chain according to Claim 8 or 9, comprising donor residues at positions 2, 4, 6, 35, 36, 38, 44, 47, 49, 62, 64-69, 85, 87, 98, 99, 101 and 102.
- 11. A CDR-grafted light chain according to Claim 9 or 10, comprising donor residues at one, some or all of positions:

 1 Ind 3,
 63,

60 (if 60 and 54 are able to form a potential saltbridge),

70 (if 70 and 24 are able to form a potential saltbridge),

73 and 21 (if 47 is different between donor and acceptor),

37 and 45 (if 47 if different between donor and acceptor), and

any one or more of 10, 12, 40, 83, 103 and 105.

12. A CDR-grafted light chain according to any one of Claims 6-11, comprising donor CDRs at positions 24-34, 50-56 and 89-97.

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- 13. A CDR-grafted antibody molecule comprising at least one CDR-grafted heavy chain according to any one of Claims 1-5 and at least one CDR-grafted light chain according to any one of Claims 6-12.
- 14. A CDR-grafted antibody molecule according to Claim 13, which is a site-specific antibody molecule.
- 15. A CDR-grafted antibody molecule according to Claim 13 which has specificity for an interleukin, hormone or other biologically active compound or a receptor therefor.
- 16. A CDR-grafted antibody heavy or light chain or molecule according to any one of the preceding claims comprising human acceptor residues and non-human donor residues.
- 17. A DNA sequence which codes for a CDR-grafted heavy chain according to Claim 1 or a CDR-grafted light chain according to Claim 6 or Claim 8.
- 18. A cloning or expression vector containing a DNA sequence according to Claim 17.
- 19. A host cell/transformed with a DNA sequence according to Claim 17.
- 20. A process for the production of a CDR-grafted antibody sequence according to Claim 17 in a transformed host cell.
- 21. A process for producing a CDR-grafted antibody product comprising:

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- (a) producing in an expression vector an operon having a DNA sequence which encodes an antibody heavy chain according to Claim 1; and/or
- (b) producing in an expression vector an operon having a DNA sequence which encodes a complementary antibody light chain according to Claim 6 or Claim 8;
- (c) transfecting a host cell with the or each vector; and
- (d) culturing the transfected cell line to produce the CDR-grafted antibody product.
- 22. A therapeutic or diagnostic composition comprising a CDR-grafted antibody heavy chain according to Claim 1, or a CDR-grafted light chain according to Claim 6 or Claim 8, or a CDR-grafted antibody molecule according to Claim 13 in combination with a pharmaceutically acceptable carrier, diluent or excipient.
- 23. A method of therapy or diagnosis comprising administering an effective amount of a CDR-grafted heavy chain according to Claim 1, or a CDR-grafted light chain according to Claim 6 or Claim 8, or a CDR-grafted antibody molecule according to Claim 13 to a human or animal subject.

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